

**Notice of Allowability**

Application No.

10/724,260

Examiner

Janis L. Dote

Applicant(s)

EMOTO ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 19 Apr. 2006.
2. ☒ The allowed claim(s) is/are 1-10 and 12-18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 2/10/06; 3/24/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

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1. The examiner acknowledges the amendment to claim 1 and the cancellation of claim 11 set forth in the amendment filed on Apr. 19, 2006. Claims 1-10 and 12-18 are pending.

2. The examiner has considered the US applications listed on the "List of related cases" in the Information Disclosure Statements filed on Feb. 10, 2006, and Mar. 24, 2006.

Contrary to applicants' statement on page 6 of the response filed on Apr. 19, 2006, the present record does not show that an Information Disclosure Statement was filed on Jun. 23, 2005.

Thirteen Information Disclosure Statements (IDS) are of record in the instant application. They were filed on (1) Dec. 1, 2003, (2) Feb. 17, 2004, (3) Mar. 1, 2004, (4) Nov. 16, 2004, (5) Dec. 8, 2004, (6) Jan 11, 2005, (7) Feb. 14, 2005, (8) Mar. 1, 2005, (9) Apr. 21, 2005, (10) Nov. 16, 2005, (11) Dec. 16, 2005, (12) Feb. 10, 2006, and (13) Mar. 24, 2006.

#### **REASONS FOR ALLOWANCE**

3. The following is an examiner's statement of reasons for allowance:

The rejection of claims 1-10, 12, and 15-18 under 35 U.S.C. 102(e) over US 2003/0138717 A1 (Yagi), as evidenced by applicants' admission at page 10, lines 7-18, and page 11,

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lines 2-6, set forth in the office action mailed on Jan. 27, 2006, paragraph 6, has been withdrawn in response to the amendment to claim 1 set forth in the amendment filed on Apr. 19, 2006. That amendment to claim 1 added the limitation of now-cancelled claim 11 that "the particulate resin material has a volume-average molecular weight of from 1,000 to 100,000." As discussed in the rejection in paragraph 6, Yagi exemplifies toner particles and organic fine resin particles 1 adhered to the surface of the toner particles at a coverage ratio of 85%. However, Yagi does not disclose or suggest that its particulate material has a volume-average molecular weight of 1000 to 100,000 as recited in instant claim 1 for the reasons discussed in the office action mailed on Mar. 21, 2005, paragraph 13, which are incorporated herein by reference.

Instant claims 1-10 and 12-18 are allowable over the prior art of record for the reasons discussed above and the reasons discussed infra.

The following references, which are listed on the Information Disclosure Statement (IDS) filed on Feb. 14, 2005, were listed as "X" references on the European Search Report filed in that IDS.

EP 1,205,813 A (EP'813) exemplifies a toner comprising toner particles that comprise a binder resin and a releasing

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agent and externally added hydrophobic silica particles and hydrophobic titanium oxide particles. The binder resin comprises an unmodified polyester resin and a modified polyester in a weight ratio of the modified polyester resin to the unmodified polyester resin of 1/9, which is within the weight ratio range of 5/95 to 40/60 recited in instant claim 1. See, for example, example 1 at pages 10-11, toner (I). Although EP'813 does not exemplify a toner comprising externally added resin particles, EP'813 teaches that resin particles can be used as an external toner additive. EP'813, page 7, paragraph 0058. However, there is no disclosure in EP'813 that its modified polyester resin has a glass transition temperature (T<sub>g</sub>) of 40 to 55°C as required in instant claim 1. Nor does EP'813 teach or suggest that the externally added resin particles are present on the surface of the toner particles in a "coverage of from 50 to 100%" as required in instant claim 1. Nor does EP'813 teach or suggest that the resin particles have a T<sub>g</sub> of 50 to 90°C or have a volume-average molecular weight of 1,000 to 100,000 as required in instant claim 1. Nor does EP'813 teach or suggest that its toner has a storage modulus at 180°C (G'180) and a storage modulus at 80°C (G'80) such that the ratio of G'80 to G'180 is 100 to 1,000, as required in instant claim 1. Nor is there sufficient evidence in the present record for a person

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having ordinary skill in the art to reasonably presume that the EP'813 modified polyester resin has the required Tg recited in instant claim 1 or that the EP'813 toner has the required storage modulus ratio recited in instant claim 1.

EP 1,243,976 A (EP'976) exemplifies a toner comprising toner particles that comprise a binder resin, a colorant, and a releasing agent and externally added hydrophobic silica particles and hydrophobic titanium oxide particles. The binder resin comprises an unmodified polyester resin and a modified polyester in a weight ratio of the modified polyester resin to the unmodified polyester resin of 1/9, which is within the weight ratio range of 5/95 to 40/60 recited in instant claim 1. See, for example, example 1 at page 13, toner (1). Although EP'976 does not exemplify a toner comprising externally added resin particles, EP'976 teaches that resin particles can be used as an external toner additive. EP'976, page 9, paragraph 0081. However, there is no disclosure in EP'976 that its modified polyester resin has a glass transition temperature (Tg) of 40 to 55°C as required in instant claim 1. Nor does EP'976 teach or suggest that the externally added resin particles are present on the surface of the toner particles in a "coverage of from 50 to 100%" as required in instant claim 1. Nor does EP'976 teach or suggest that the resin particles have a Tg of 50 to 90°C or have

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a volume-average molecular weight of 1,000 to 100,000 as required in instant claim 1. Nor does EP'976 teach or suggest that its toner has a storage modulus at 180°C (G'180) and a storage modulus at 80°C (G'80) such that the ratio of G'80 to G'180 is 100 to 1,000, as required in instant claim 1. Nor is there sufficient evidence in the present record for a person having ordinary skill in the art to reasonably presume that the EP'976 modified polyester resin has the required Tg recited in instant claim 1 or that the EP'976 toner has the required storage modulus ratio recited in instant claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Mr. Nam Nguyen, can be reached on (571) 272-1342. The central fax phone number is (571) 273-8300. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Janisl Dote*  
JANIS L. DOTE  
PRIMARY EXAMINER  
GROUP 1500  
1700

JLD

Jul. 5, 2006